



# PHILIPS

## SERVICE

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equipment  
for science  
and industry

### TEST AND MEASURING EQUIPMENT OSCILLOSCOPE

750415

PM 3260

Cd 855

1. The circuit-block 5322 209 84424 (code stamp 4022 105 25160\*) which is located in the Y-input attenuators, exists in different versions.

The version is identified by a coloured dot on the circuit-block. Depending on the version a different resistor value of R122 must be applied according to following table.

<i>Circuit block</i>	<i>R122</i>
without ident. dot	68 k ohm
with red dot	43 k ohm
with green dot	120 k ohm

Use of the appropriate resistor is important otherwise the "BAL" adjustment will give problems.

2. Bad contacts in the small 50-ohms coaxial connectors can be caused by loose particles in the inner female contact.  
This contact can be cleaned by using a dia. 0,75 mm twist-drill.
3. Both diodes GR522 and GR523 which have been connected in series between grid no. 1 and the cathode of the cathode-ray-tube, and which are located on the socket of the c.r.t. can be removed.
4. In versions -/01 and -/02 of the PM 3260 the linearity of the ext. x deflection can be improved by selecting resistors R1411, R1412 and R1414. Also selection of TS1403 may give improvement.
5. From PM 3260/03 on resistors R622, 624, 638, 643, 648, 652 on the mtb unit, and resistors R1022, 1024, 1038, 1043, 1048, 1052 on the dtb unit are 56 ohms each.
6. The switching regulator transistor BU108 (TS1801) in the power supply unit must be selected at a  $h_{FE}$  of minimum 8 and maximum 27, at a base current of 300  $\mu$ A.  
Depending on the value of the  $h_{FE}$  an appropriate value for R1817 must be selected according to following table.

<i><math>h_{FE}</math></i>	<i>R1817</i>
8 ... 12	24,9 k ohm
12 ... 18	36 k ohm
18 ... 27	56 k ohm

7. It is recommended to replace TS1805 (type BC549C) in the power supply unit, by a BC546 which withstands higher collector voltages.
8. It is recommended to replace TS2004 (type BSW66) in the 2 kV generator, by a BSW68 which withstands higher collector voltages.

\*) The last digit 0 may be any other figure.

9. The zener-diode GR407 (type BZY88/C3V3) must be selected to a voltage between 3,2 and 3,4 volt. Moreover, a capacitor of 10.000 pF must be connected in parallel to this diode, and R433 must be changed to 750 ohm.

#### 10. Delay line

Some older models suffered from bad solder connections inside the delay line, resulting in bad vertical stability. From serialnr. D1700 on, this problem has been solved by improved soldering technique. Delay-lines from now on delivered by Service are all of the improved version.

Here are some hints if you want to repair the delay-line yourself.

When soldering in the delay-line keep a plug in the relevant socket to prevent deformation of the centre contact setting.

If necessary the upper printboard of the delay-line can be removed by unsoldering the six soldering connections one after each other.

By slightly enlarging the holes in the upper print board better heat-contact of the soldering iron is possible.

When assembling take care to remove every small metal particle or other, from the interior of the delay-line unit.

#### List of modified or added components

Resistor R433 750 ohm	5322 116 54536
Transistor BC546	4822 130 41001
Transistor BSW68	5322 130 40714
LED CQY24 (GR1 ... 3)	4822 130 30885
Socket of graticule illum. lamps	5322 255 24015
50-ohms cable (500 mm) with plug on one end	5322 320 10064